Amendments to the Claims

Please cancel claims 24-31 without prejudice.

The following listing of claims will replace all prior versions and/or listings of claims in the application:

1. (Currently amended): A method of preparing an implant, comprising:

subjecting a bioresorbable polymeric substrate to a gas-plasma treatment, wherein subjecting the substrate to a gas-plasma treatment comprises exposing the substrate to a reactive gas, wherein the reactive gas comprises oxygen, and wherein the supplied energy during the gas-plasma treatment is between about 5 kJ and about 10 kJ; and

exposing the substrate to living cells that can produce vascular endothelial growth factor (VEGF), wherein a portion of the living cells that can produce VEGF become coupled to the substrate; and

wherein the living cells that can produce VEGF coupled to the treated substrate produce more ~~of one or more cellular products~~ VEGF than living cells that can produce VEGF coupled to an untreated substrate~~, and wherein at least one of the one or more cellular products is vascular endothelial growth factor (VEGF)~~.

2-4. (Canceled)

5. (Original): The method of claim 1, wherein the substrate comprises a polylactide polymeric material.

6. (Original): The method of claim 1, wherein the substrate comprises a three-dimensional matrix.

7. (Original): The method of claim 1, wherein the substrate comprises a planar solid.

8. (Original): The method of claim 1, wherein the substrate comprises a nonplanar solid.

9. (Original): The method of claim 1, wherein the implant is a medical implant.

10. (Canceled)

11. (Currently amended): The method of claim 1, ~~wherein subjecting the substrate to a gas-plasma treatment comprises exposing the substrate to a reactive gas,~~ wherein the reactive gas consists essentially of oxygen.

12. (Original): The method of claim 1, wherein a duration of the gas-plasma treatment is from about 1 minute to less than about 5 minutes.

13. (Currently amended): The method of claim 1, wherein subjecting the substrate to a gas-plasma treatment comprises exposing the substrate to ~~a~~ the reactive gas at a temperature of less than about 50 °C.

14. (Currently amended): The method of claim 1, wherein subjecting the substrate to a gas-plasma treatment comprises exposing the substrate to ~~a~~ the reactive gas at a pressure between about 0.01 torr and about 10 torr.

15. (Canceled)

16. (Currently amended): The method of claim 1, wherein subjecting the substrate to a gas-plasma treatment comprises exposing the substrate to ~~a~~ the reactive gas at a discharge frequency between about 10 KHz and about 100 GHz.

17. (Currently amended): The method of claim 1, wherein subjecting the substrate to a gas-plasma treatment comprises exposing the substrate to ~~a~~ the reactive gas at a discharge frequency between about 13 MHz and about 14 MHz.

18. (Currently amended): The method of claim 1, wherein subjecting a substrate to a gas-plasma treatment comprises subjecting the substrate to ~~a~~ the reactive gas comprising oxygen for a duration from about 1 minute to less than about 5 minutes, at a temperature of less than about 50 °C and a pressure between about 0.01 torr and about 10 torr, and a discharge frequency between about 13 MHz and about 14 MHz.

19. (Original): The method of claim 1, wherein the living cells comprise endothelial cells.

20. (Original): The method of claim 1, wherein the living cells comprise human aortic endothelial cells.

21. (Original): The method of claim 1, wherein the living cells comprise muscle cells.

22. (Original): The method of claim 1, wherein the living cells comprise myocardial cells.

23. (Original): The method of claim 1, wherein the living cells comprise epithelial cells.

24-31. (Canceled)

32. (Currently amended): An implant prepared by a process comprising:

subjecting a bioresorbable polymeric substrate to a gas-plasma treatment, wherein subjecting the substrate to a gas-plasma treatment comprises exposing the substrate to a reactive gas, wherein the reactive gas comprises oxygen, and wherein the supplied energy during the gas-plasma treatment is between about 5 kJ and about 10 kJ; and

exposing the substrate to living cells that can produce vascular endothelial growth factor (VEGF), wherein a portion of the living cells that can produce VEGF become coupled to the substrate; and

wherein the living cells that can produce VEGF coupled to the treated substrate produce more ~~of one or more cellular products~~ VEGF than living cells that can produce VEGF coupled to an untreated substrate~~, and wherein at least one of the one or more cellular products is vascular endothelial growth factor (VEGF)~~.

33-62. (Canceled)

63. (Currently amended): A method of preparing an implant, comprising:

~~treating~~ subjecting a bioresorbable polymeric substrate with a gas-plasma treatment, wherein the bioresorbable polymeric substrate comprises a polylactide polymeric material wherein subjecting the substrate to a gas-plasma treatment comprises exposing the substrate to a reactive gas, wherein the reactive gas comprises oxygen, wherein a supplied energy of the gas-plasma treatment is between about 5 kJ and about 10 kJ and a treatment temperature of the gas-plasma treatment is less than about 50 °C; and

exposing the substrate to living cells such that at least a portion of the living cells become coupled to the substrate;

wherein the living cells coupled to the treated substrate produce more of one or more cellular products than living cells coupled to an untreated substrate, and wherein at least one of the one or more cellular products is vascular endothelial growth factor (VEGF).

64-129. (Canceled)